

KUZNETSOV, A. P.

KUZNETSOV, A. P. Milling-machines for high speed cutting. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1949 83 p. (Tekhnologiya mashinostroeniia)  
(51-37040)

TJ1225.K85

KUZNETSOV, A.P., kandidat tekhnicheskikh nauk; TIKHONOV, I.I., inzhener.

Surface defects appearing on tin bronze following turning. Vest.mash. 33  
no.11:56-58 M '53. (MLRA 6:12)  
(Bronze)

KUZNETSOV, A. P.

TJ1160.A34

TREASURE ISLAND BOOK REVIEW

AID 854 - S

KUZNETSOV, A. P.

SKOROSTNYYE METODY OBRABOTKI I USLOVIYA DAL'NEYSHEGO IKH RAZVITIYA (Speed Cutting of Metals and Conditions required for further Development of this Method). In Akademiya Nauk SSSR. Peredovoy opyt novatorov mashinostroyeniya (Progressive Experience of Leading Men in the Machine-Building Industry) 1954. Part I: Skorostnyye metody mekhanicheskoy obrabotki metallov (High-Speed Methods in Machining of Metals). p. 68-77.

The author briefly outlines the latest practical achievements in speed cutting with hard alloyed tools of such parts as locomotive axles and ball-and-socket joints for suction dredges. He makes several suggestions for improvement and further development of metal-cutting machine-tools, including V. N. Godyayev's cutter, and advises further expansion of plant laboratory activities in promoting new equipment and methods of metal processing. He thinks that the Academy of Sciences' institutes and local scientific research institutions should help the laboratories in their work. The section on the mineral-ceramic cutting construction, testing, and use of mineral-ceramic cutters is presented by the author in collaboration with A. I. Gusev, Engineer. Eight pictures and diagrams, and several GOST standards.

1/1

*KUZNETSOV, A.P.*

USSR/Miscellaneous - Machine tools

Card 1/1      Pub. 103 - 16/23

Authors      :      Kuznetsov, A. P., and Tikhonov, I. I.

Title      :      ~~Grinding and lapping of mineral-ceramic plates for tools~~  
Grinding and lapping of mineral-ceramic plate for tools

Periodical   :      Stan. 1 instr. 2, 35-36, Feb 1954

Abstract      :      Various methods are introduced for the grinding and lapping of mineral-ceramic, high temperature resistant plates used for machine tools. The attachments used for the grinding are described. Drawings.

Institution   :      .....

Submitted      :      .....

KUZNETSOV, A.P.; GORELOV, V.M., inzhener, redaktor; KRAVTSOV, V.S.,  
redaktor; DUGINA, N.A., tekhnicheskii redaktor.

[Drilling] Sverlenie. Pod red. V.M. Gorelova. Izd.2-e perer.  
Moskva, Gos.nauchno-tekhn.izd-vo mashinostroitel'noi lit-ry,  
1955. 45 p. (Nauchno-populiarnaiia biblioteka rabochego  
stanochnika no.13) (MLRA 8:10)  
(Drilling and boring)

KUZNETSOV, A.P.; TIKHONOV, A.I.

Screens for protection against shavings. Stan. 1 instr.  
26 no.5:13-14 My '55. (MLBA 8:8)  
(Machinery--Safety appliances)

KUZELEV, V.Ya.; KUZNETSOV, A.P.

Manufacturing tools in school workshops. Politekh.obuch. no.12:  
58-61 D '58. (MIRA 11:12)

1. Srednyaya shkola No.475 Moskvyy.  
(Machine-shop practice--Study and teaching)

PHASE I BOOK EXPLOITATION

SOV/3912

Kuznetsov, Aleksandr Petrovich

Sverleniye (Drilling) 3rd ed. Moscow, Mashgiz, 1959. 46 p. (Series: Nauchno-populyarnaya biblioteka rabochego-stanochnika, vyp. 14) 17,000 copies printed.

Ed.: V.M. Gorelov, Engineer; Executive Ed. (Ural-Siberian Division, Mashgiz): G.A. Sarafannikova; Tech. Ed.: N.A. Dugina.

PURPOSE: This booklet is intended for machine-tool operators studying to improve their skill.

COVERAGE: The book deals with characteristic features of the drilling process, the construction and geometry of twist drills, and methods of sharpening and inspection of drills. The construction of drills for drilling deep holes and methods of coolant supply and chip removal are discussed. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

Introduction  
Card 1/2

3



Drilling	
Operational Motion and Chips in Drilling	80V/3912
How the Drill was Perfected	5
Twist Drill	9
Measurement of Twist Drills	12
Forces Acting on a Drill	17
Wear and Sharpening of Twist Drills	20
Cutting Speed	24
On Methods of Improving the Productivity of Drilling	28
High-Speed Drilling	30
Deep Drilling	35
Conclusion	38
AVAILABLE: Library of Congress	46
Card 2/2	

VK/PW/SEP  
7-18-60

ANDREYEV, G.S., kand. tekhn. nauk; BOKUCHAVA, G.V., kand. tekhn. nauk, dots.; BRAKMAN, L.A., inzh.; BUDNIKOVA, A.V., inzh.; GORDON, M.B., kand. tekhn. nauk, dots.; ZHAVORONKOV, V.N., inzh.; KARZHAVINA, T.V., kand. tekhn. nauk; KOROTKOVA, V.G., inzh.; KORCHAK, S.N., inzh.; KLUSHIN, M.I., kand. tekhn. nauk, dots.; KUZNETSOV, A.P., kand. tekhn. nauk, dots.; KURAKIN, A.V., inzh.; LATYSHEV, V.N., inzh.; OL'KHOVSKIY, V.N., inzh.; ORLOV, B.M., kand. tekhn. nauk, dots.; OSHER, R.N., inzh.; PODGORKOV, V.V., inzh.; ; SIL'VESTROV, V.D., kand. tekhn. nauk [deceased]; TIKHONOV, V.M., inzh.; TROITSKAYA, D.N., inzh.; KHRUL'KOV, V.A., inzh.; LESNICHENKO, I.I., red. izd-va; SOKOLOVA, T.F., tekhn. red.; GORDEYEVA, L.P., tekhn. red.

[Lubricating and cooling fluids and their use in cutting metals]  
 Smazochno-okhlazhdaiushchie zhidkosti pri rezanii metallov i  
 tekhnika ikh primeneniia. Moskva, Gos. nauchno-tekhn. izd-vo  
 mashinostroit. lit-ry, 1961. 291 p. (MIRA 15:1)  
 (Metalworking lubricants)

KUZNETSOV, A.P.; KIRILLOV, A.A., inzhener, retsentsent; BOGDANOV, A.V.,  
~~inzhener~~, redaktor.

[Assembling welded metal structures; advanced training manual for  
workers] Sbornik svarnykh metallicheskich konstruktsii; uchebnoe po-  
sobie dlia povysheniia kvalifikatsii rabochikh. Sverdlovsk, Gos.  
nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry [Uralo-Sibirskoe  
otd-nie] 1953. 147 p. (MLRA 7:6)  
(Electric welding) (Building, Iron and steel)

KUZNETSOV, A.P.

Distribution of bottom fauna in Kronotskiy Gulf. Trudy Inst.ocean.  
36:105-122 '59. (MIRA 15'4)

(Kronotskiy Gulf--Marine fauna)

USSR / General Biology. General Hydrobiology.

B

Abs Jour : Ref Zhur - Biologiya, No 4, 1959, No. 14479

Author : Kuznetsov, A. P.

Inst : Not given

Title : The Feeding Fields of Flounders in the  
Kronotskiy Gulf

Orig Pub : Rybn. kh-vo, 1958, No 1, 7-11

Abstract : The study is presented on the composition and the size of the feeding biomass of benthos, taking into account the feed's composition as well as the general nature of the nutrition of flounders (F) which are the basic industrial benthos eating fishes of the gulf. In December-March, F of the Kronotskiy gulf form a dense accumulation at a depth of 200-300 m (the feeding biomass of

Card 1/2

USSR / General Biology. General Hydrobiology.

B

Abs Jour : Ref Zhur - Biologiya, No 4, 1959, No. 14479

benthos is highest here). At this time of the year, F do not feed and do not utilize the rich feeding fields. In the fattening period from May to September F stay in the shallow waters of the gulf, which are poor in feeds.

Card 2/2

KUZNETSOV, A. P.

Distribution of bottom fauna in the coastal waters of the Kurile  
Islands. Trudy Inst.ocean. 36:226-258 '59. (MIRA 15:4)  
(Kurile Islands region—Marine fauna)

1'  
s/

KUZNETSOV, A. P.: Master Biol Sci (diss) -- "Benthic fauna of the Pacific waters near the Kamchatka and the northern Kurile Islands". Moscow, 1959. 16 pp (Acad Sci USSR, Inst of Oceanography), 120 copies (KL, No 11, 1959, 117)

SOKOLOVA, M.N.; KUZNETSOV, A.P.

Nature of feeding and role of the trophic factor in the distribution  
of the sand dollar *Echinarachnius parma* Lam. Zool. zhur. 39 no.8:  
1253-1256 Ag '60. (MIRA 13:8)

1. Institute of Oceanology, U.S.S.R. Academy of Sciences, Moscow.  
(Soviet Far East--Sea urchins)



KUZNETSOV, A.P.

Materials on the ecology of some forms of benthos occurring in large masses in the region of eastern Kamchatka and northern Kurile Islands.  
Trudy Inst.ocean. 46:85-97 '61. (MIRA 14:6)  
(Pacific Ocean--Sea Urchins) (Pacific Ocean--Lamellibranchiata)

KUZNETSOV, A.P.; SOKOLOVA, M.N.

Nature of feeding and distribution of *Ophiopholis aculeata* (L.).  
Trudy Inst.ocean. 46:98-102 '61. (MIRA 14:6)  
(Kurile Islands—Ophiuroidea)

KUZNETSOV, A.P.

Materials on quantitative estimation of the bottom fauna of the  
Kamchatka Gulf. Trudy Inst.ocean. 46:103-123 '61. (MIRA 14:6)  
(Kamchatka Gulf---Benthos)

LUS, V.Ya.; KUZNETSOV, A.P.

Materials on quantitative estimation of bottom fauna in the Korf-Karaginskiy area (Bering Sea). Trudy Inst.ocean. 46:124-139 '61.  
(Korf Bay—Benthos) (Karaginskiy Gulf—Benthos) (MIRA 14:6)

KUZNETSOV, A.P.

Materials on the zoogeography of Pacific waters near Kamchatka and  
the northern Kurile Islands. Dokl. AN SSSR 137 no.2:415-418 Mr '61.  
(MIRA 14:2)

1. Institut okeanologii AN SSSR. Predstavleno akademikom Ye.N.  
Pavlovskim.

(Soviet Far East—Marine fauna)

KUZNETSOV, A.P.

Some characteristics of the structure and distribution of marine biocenoses as exemplified by the biocenoses of the area of eastern Kamchatka and northern Kurile Islands. Vop. skol. 4:41-42 '62. (MIRA 15:11)

1. Institut okeanologii AN SSSR, Moskva.  
(Kamchatka--Marine ecology) (Kurile Islands--Marine ecology)

KUZNETSOV, Aleksey Pavlovich; FILATOVA, Z.A., otv. red.; MAKUSHOK,  
V.M., red. izd-va; RYLINA, Yu.V., tekhn. red.

[Bottom invertebrates of the Kamchatka waters of the Pacific  
Ocean and the northern Kurile Islands] Fauna donnykh besposvonochnykh  
Prikamohatskikh vod Tikhogo okeana i severnykh Kuril'skikh  
ostrovov. Moskva, Izd-vo AN SSSR, 1963. 268 p. (MIRA 16:10)  
(Pacific Ocean--Invertebrates)

KUZNETSOV, A.P., kand.biolog.nauk

Luminescence of water in the Atlantic. Priroda 52 no.10:102-104  
'63. (MIRA 16:12)

1. Institut okeanologii AN SSSR, Moskva.



KUZNETSOV, A.P.

Distribution of the bottom fauna in the western part of the Bering  
Sea by trophic zones and some general problems in trophic zonation.  
Trudy Inst. okean. 69:98-177 '64. (MIRA 17:9)

PHASE I BOOK EXPLOITATION

770

Kuznetsov, Anatoliy Pavlovich

Sborka i svarka metallicheskih konstruktsiy (Assembling and Welding Metal Structures) 2d ed., rev. and enl. Moscow, Mashgiz, 1957.  
12,000 copies printed.

Reviewer: Galaktionov, A.T. Candidate of Technical Sciences; Tech. Ed.:  
Dugina, N.A.; Executive Ed. Ural-Siberian Division, Mashgiz:  
Vakhonin, L.N., Engineer.

PURPOSE: The monograph is intended for assembly men and welders interested in improving their qualifications and for inspectors charged with checking the quality of assembly work and welding in plants fabricating engineering metal structures.

COVERAGE: The basic processing and engineering problems arising in the assembly and welding of metal structures are described. Materials used in the fabrication of metal structures and types of structures

Card ~~1/1~~

# Assembling and Welding Metal Structures

770

are briefly treated. Manual, semiautomatic and automatic metal arc welding and the equipment used in these processes are discussed. Considerable attention is given to preparation of metal structures for welding, to deformations occurring in weldments, to welding manipulators, roller beds and other fixtures and tools required for efficient assembly and welding operations. Mechanization of assembly work and welding, their quality control, and safety techniques are also described. There are 28 Soviet references. No personalities are mentioned.

## TABLE OF CONTENTS:

### Foreword

Ch. I. Materials for Fabrication of Metal Structures	3
1. Ferrous metals	4
2. Mechanical properties of steel	4
3. Effect of alloying elements and impurities on the properties of steel	5
4. Marking of steel	10
Card 2/ 11	11

NIKULIN, Aleksandr Prokop'yevich, sborshchik metallokonstruktsiy; SERGACHEV, M.P., inzh., retsenzent; PINTUSOV, I.M., inzh., red.; KUZNETSOV, A.P., inzh., red.; DUGINA, N.A., tekhn.red.

[Efficient methods of assembling metal structures] Proizvoditel'nye priemy sborki metallokonstruktsii. Moskva, Gos.nauchno-tekhn.isd-vo mashinostroit.lit-ry, 1958. 41 p. (MIRA 12:3)

1. Uralmeshzavod (for Nikulin).  
(Building, Iron and steel)

GALAKTIONOV, A.T.; DENISOV, Yu.A.; KOPYTOV, G.T.; MASLOV, Yu.A.; NIKONOV, I.P.; PETUNIN, I.V.; KOCHIEVA, G.N.; KUZNETSOV, A.P.; LELEKO, N.M.; RAZIKOV, M.I.; SPESHKOV, V.V.; STEPANOV, B.V., STEPANOV, V.V., kand. tekhn. nauk; SHELOMOV, B.Ye.; YUNISHEV, G.P.; YES'KOV, K.A., dots., retsenzent; BAKSHI, O.A., dots., retsenzent; BEREZKIN, P.N., dots., retsenzent; PATSKEVICH, I.R., dots., retsenzent; RUDAKOV, A.S., dots., retsenzent; FIZHBEYN, N.B., inzh., retsenzent; KHRUSTALEV, L.Ya., inzh., retsenzent; KRUTIKHOVSKIY, V.G., inzh., red. BOBROV, Ye.I., kand. tekhn. nauk, red. DUGINA, N.A., tekhn. red.

[Welding handbook] Spravochnik rabocheho-svarshchika. Pod red. V.V.Stepanova. Moskva, gos. nauchno-tekhnizd-vo mashinostroit. lit-ry, 1960. 640 p. (Welding) (MIRA 14:6)

KUZNETSOV, A.P.

Rigidity of the distributor box in the ZIL-151 automobile. Avt.1  
trakt.prom. no.7:11-13 J1 '57. (MIRA 10:11)

1. Moskovskiy avtomekhanicheskiy institut.  
(Automobiles--Transmission devices)

KUZNETSOV, A. P., Cand Tech Sci -- (diss) "Study of ~~the~~ hardness of the  
elements of automobile gearboxes." Mos, 1958. 17 pp (Min of Higher  
Education USSR, Mos Automechanical Inst, Chair "Automobile <sup>Building</sup> ~~Construction~~").  
120 copies (KL, 17-58, 108)

- 42 -

Kuznetsov, A.P.

25(1) PHASE I BOOK EXPLOITATION SOV/2931  
Konferentsiya po voprosam rascheta, konstruirovaniya i issledovaniya zubchatykh peredach i peredach giboy svyaz'yu. Odessa, 1957  
Raschet, konstruirovaniya i issledovaniya peredach: trudy konferentsii... Vyp. 3 (Design, Construction, Problems in Transmission: Papers of the Conference, 1957). Odessa: Tekhnicheskaya shkola, 1959. No. 3) (Odessa) Izd. Odeskogo politekhn. in-ta, 1959. 124 p. 3,000 copies printed.  
Sponsoring Agencies: Odeskii politekhnicheskii institut, and Nauchno-tekhnicheskoye obshchestvo mashinostroitel'noy promyshlennosti. Odeskoye oblastnoye pravleniye.  
Ed.: I. P. Miforov, Engineer; Editorial Board: L. S. Borovikh, Candidate of Technical Sciences; M. S. Belyaev, Engineer; V. B. Gulin, Candidate of Technical Sciences; P. S. Zak, Engineer; M. I. Zablonskiy, Candidate of Technical Sciences; Ya. G. Kis'tyan, Candidate of Technical Sciences; V. M. Kudryavtsev, Doctor of Technical Sciences; V. P. Mal'tsev, Candidate of Technical Sciences; M. S. Tolotskiy, Candidate of Technical Sciences; and L. B. Erlich, Candidate of Technical Sciences; Tech. Ed.: A. R. Komisarukho.

PURPOSE: This book is intended for design engineers in the machine-building and automotive industries, particularly gear designers.

COVERAGE: The technical papers contained in this book were originally presented at a conference on gear design held in Odessa in 1957. A number of papers deal with the causes of failure in modern gear drives under such severe service conditions as seizing and jamming. To determine these causes a study was made of the wear resistance of contact surfaces and the rigidity of gear teeth under load. Various gear drives and systems of engagement, including the Novikov-type gears, which are claimed to have many superior characteristics, and the still-developing type of worm gear drive are compared. A study is made of the rigidity of gears, particularly of the rigidity of splined gear-shaft joints. Particularly interesting testing methods and devices are also listed. No personalization.

Grishel, I. M. Load-bearing Capacity of a Gear System by N. B. Morikow 81  
Frankel, I. M. Experimental Determination of the Rigidity of 30-degree Spur Gear Teeth 89  
Orskov, G. M., and V. P. Belitsers. Method of Gear Testing on a Roller Machine 57  
Seleznev, Yu. S. Study of Gear Wear of Reduction Mechanisms in Electric Hook Drills 65  
Kurashko, V. P., and K. I. Zablonskiy. Contact Wear Resistance of Heavily Loaded Gears With Stepped Load Increase 73  
Kuznetsov, A. P. Study of the Rigidity of Certain Elements of Automobile Transmissions 85  
Tatarskiy, V. G. Design of Teeth for the M. L. Morikow Gear Train and Some Special Features of Composite Gear Drives 91  
Tatarskiy, V. G. Relationship Between Load Distribution in a Splined Joint of a Gear and Shaft and the Rigidity of Components in the Joint 97  
Olsroy, O. P. Maximum Value of the Coefficient of Overlap in Spur Gear Trains With External Engagement With Straight Involute Teeth and Angular Correction 103  
Zablonskiy, K. I. Gear-testing Installation 121



AUTHOR: SOV/113-59-2-3/20  
Fal'kevich, B.S., Doctor of Technical Sciences, Levin, I.A.,  
Candidate of Technical Sciences, and Kuznetsov, A.P., Can-  
didate of Technical Sciences

TITLE: Some Problems in Gas-Turbine Automobile Construction (Neko-  
toryye voprosy gazoturbinnogo avtomobilestroyeniya)

PERIODICAL: Avtomobile'naya promyshlennost', 1959, Nr 2, pp 3-6 (USSR)

ABSTRACT: The "Automobile" Department at the Moscow Institute of  
Automobile Engineering has started developing the theory of  
the gas-turbine automobile in order to establish how best to  
design and operate it. The article deals with the general  
theory of gas-turbine power plants for automobiles and  
describes the characteristic features of the current (USA,  
England, France, Spain, and Italy) turbine-driven vehicles.  
There are 6 graphs, 4 tables, 2 diagrams, and 1 Soviet  
reference.

ASSOCIATION: Moskovskiy avtomekhanicheskii institut (Moscow Institute  
of Automobile Engineering)

Card 1/1

FAL'KEVICH, B.S., doktor tekhn.nauk; KUZNETSOV, A.P., kand.tekhn.nauk

Traction properties of a gas-turbine motor vehicle. Avt.prom.  
no.3:10-14 Mr '60. (MIRA 13:6)

1. Moskovskiy avtomekhanicheskiy institut.  
(Motor vehicles--Dynamics)

KUZNETSOV, A.P., kand.tekhn.nauk

Effect of transmission parameters on dynamic properties of  
a gas-turbine motor vehicle. Izv.vys.ucheb.sov.; mashinostr.  
no.9:62-70 '61. (MIRA 14:12)

1. Moskovskiy avtomekhanicheskiy in-titut.  
(Motor vehicles---Engines(Compressed-gas))

KUZNETSOV, A. P., kand. tekhn. nauk; MORIN, M. M., kand. tekhn. nauk;  
dot sent

Rigidity calculation of motor-vehicle spur gear transmissions.  
Izv. vys. ucheb. zav.; mashinostr. no.7:235-243 '62,  
(MIRA 16:1)

1. Moskovskiy avtomekhanicheskiy institut i Vsesoyuznyy  
zaochnyy mashinostroitel'nyy institut.

(Motor vehicles—Transmission devices)

FESENKO, V.K.; KUZNETSOV, A.P., kand. tekhn. nauk

Road tests of the ZIL-127 motorbus with the TurboNAMI-053  
gas-turbine engine. Avt. prom. 30 no.5:23-26 My '64.

(MIRA 17:9)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo  
Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy.  
institut i Moskovskiy avtomekhanicheskiy institut.

CHAYKOVSKIY, V.F., kand.tekhn.nauk, dotsent; KUZNETSOV, A.P., inzh.

Low-temperature generators of cold. Trudy OTIPiKhP 12:22-32 '62.

(MIRA 17:1)

1. Kafedra kholodil'nykh mashin Odesskogo tekhnologicheskogo instituta  
pishchevoy i kholodil'noy promyshlennosti.

CHAYKOVSKIY, V.F., kand.tekhn.nauk, dotsent; KUZNETSOV, A.P., inzh.; LOS', V.I.,  
inzh.; CHERTOK, V.D., inzh.

Enthalpy-concentration diagram for the Freon 12 - Freon 22 mixture.  
Trudy OTIPiKhP 12:37-47 '62. (MIRA 17:1)

1. Kafedra kholodil'nykh mashin Odesskogo tekhnologicheskogo instituta  
pishchevoy i kholodil'noy promyshlennosti.

KUZNETSOV, A. P.

"Refrigerant mixtures in compression refrigerating machines."

Report presented at the 11th International Congress of Refrigeration,  
(IIR), Munich, West Germany, 27 Aug-4 Sep 63.



CHAYKOVSKIY, V.F., kand.tekhn.nauk; KUZNETSOV, A.P., inzh.

Utilization of refrigerant mixtures in compression refrigerating systems.  
Khol.tekh. 40 no.1:9-11 Ja-F '63. (MIRA 16:3)

1. Odesskiy tekhnologicheskii institut pishchevoy i kholodil'noy  
promyshlennosti.

(Refrigerants)

KUZNETSOV, A.P., inzh.; GRANIK, Ch.B., inzh.

Nomograms of the working parameters of a low-temperature  
two-refrigerant system refrigerating plant. Khol. tekhn. i  
tekhn. no.1:54-60 '65. (MIRA 18:9)

KUZNETSOV, A.P., inzh.

Automatic refrigeration unit. Avt.dor. 28 no.3:13-14 Mr '65.

(MIRA 18:5)

ACC NR: AP6009832

(A)

SOURCE CODE: UR/0413/66/000/004/0024/0024

AUTHOR: Chaykovskiy, V. F.; Kuznetsov, A. P.; Dankovskiy, V. B.

ORG: none

TITLE: A refrigeration unit which uses a two-component coolant. Class 17, No 178831

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 4, 1966, 24

TOPIC TAGS: refrigeration equipment, coolant, vapor condensation, gas compression, refrigerant gas

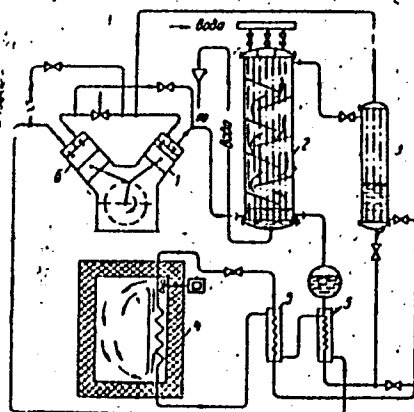
ABSTRACT: This Author's Certificate introduces a refrigeration unit which uses a two-component coolant. The device contains a compressor for the two-component vapor, a water- or air-cooled condenser where the high-boiling component is liquified, a vaporizing condenser for liquefaction of the low-boiling element by vaporization of the high-boiling component, a vaporizer for cold production and regenerated heat exchangers in which both components are recooled. The overall dimensions are reduced and the power indices are improved by using a booster at the input of the compressor for compressing the vapor of the low-boiling component.

UDC: 621.574.9-146.2

Card 1/2

2

ACC NR: AP6009832



1--compressor; 2--condenser; 3--vaporizer  
condenser; 4--vaporizer for cold production;  
5--regenerative heat exchangers; 6--booster

SUB CODE: 13/

SUBM DATE: 20Jul64/

ORIG REF: 000/

OTH REF: 000

Card 2/2

B&B

KUZNETSOV, A. P.

KUZNETSOV, A. P.: "The vertical distribution of ozone in the atmosphere." Moscow Order of Lenin and Order of Labor Red Banner State U imeni M. V. Lomonosov. Physics Faculty. Moscow, 1956. (Dissertation for the Degree of Candidate in Physicomathematical Sciences.)

SO: Knizhnaya Letopis', No. 26, 1956

A. P. Kuznetsov, A. P.  
AUTHOR: Kuznetsov, A. P.

49-9-6/13

TITLE: Observation of the vertical distribution of ozone in the atmosphere. (Nablyudeniye vertikal'nogo raspredeleniya ozona v atmosfere).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, 1957, No.9, pp.1154-1163 (USSR)

ABSTRACT: A description is given of a photo-electric spectrophotometer intended for measuring the vertical distribution of the ozone in the atmosphere, which is essentially an improved version of the well-known Dobson photo-electric spectrophotometer and was built by the Moscow State University (MGU). A photo of the spectrophotometer is shown in Fig.1, p.1156. Fig.2 is a sketch of the optical system. The results of the first observations by means of this instrument (graphs Figs. 3-5) and the evaluation of these results are given. In the included example the centre of gravity of the ozone was located at an altitude of 22.8 km on August 2 and an altitude of 23.2 km on August 17, 1955. Results calculated by other authors are also given for comparison. Acknowledgments are made to A. S. Kuznetsov for his valuable advice, to V.A.Iozenas  
Card 1/2 assistance in building the instrument and to

49-9-6/13

Observation of the vertical distribution of ozone in the atmosphere.

Ye. G. Natrusova and N. S. Strunina for their assistance  
in carrying out the computations.

There are 8 figures and 13 references, 5 of which are Slavic.

SUBMITTED: December 8, 1956.

ASSOCIATION: Moscow State University imeni M. V. Lomonosov.  
(Moskovskiy Gosudarstvennyy Universitet im. M.V.Lomonosova).

AVAILABLE: Library of Congress

Card 2/2



3(7)

SOV/50-58-10-4/20

AUTHORS:

Britayev, A. S., Iozenas, V. A., Kuznetsov, A. P.

TITLE:

On the Relationship Between the Total Ozone Content and Meteorological Conditions (K voprosu o svyazi obshchego sodержaniya ozona s meteorologicheskimi usloviyami)

PERIODICAL:

Meteorologiya i gidrologiya, 1958, Nr 10, pp 24-29 (USSR)

ABSTRACT:

The increasing interest in the problem mentioned in the title, in particular in connection with the International Geophysical Year, is not in accordance with the few data available on it. The most usual methods of ozone determination (according to direct sunlight and disperse light in the zenith) are limited by dull and cloudy weather (Refs 1,3,4). The determination of an interrelation between the ozone content and the synoptic processes requires continuous ozone measurements for a number of days (Refs 5-8). This is only possible in certain areas with a maximum of sunny days. In view of these facts, the Tsentral'naya aerologicheskaya observatoriya (Central Aerological Observatory) investigated the fluctuations in the ozone content as mentioned in the title. As the most suitable area that of Nizhneye Povolzh'ye (lower Volga region) was chosen. The period between April 27 and June 8 (1957) corresponds to the highest seasonal intensity of the ozone content (Refs 1,5).

Card 1/3

SOV/50-58-10-4/20

On the Relationship Between the Total Ozone Content and Meteorological Conditions

A photoelectric spectrophotometer (according to Dobson, modified) was designed by the Moskovskiy gosudarstvennyy universitet imeni M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov) and used as main device for measurements. The total content of ozone was determined according to formula (1), by means of formula (2). Table 1 presents the average values obtained. Figure 1 gives these values in connection with atmospheric pressure on the earth's surface and with the altitude of the tropopause. It may be seen from it that the higher the tropopause the less ozone is contained in the atmosphere, and vice versa. Furthermore, high ozone quantities tend to occur during a low pressure on the earth's surface, this dependence, however, being less pronounced than that on the tropopause. The relation between temperature at an altitude of 2 m and the ozone content is more difficult to be established. The results obtained confirm the relationship between the processes in the troposphere and in the lower stratosphere. It follows from it that the variations of atmospheric conditions in lower layers are one of the principal causes of the variations in the layers up to an altitude of 20-25 km. These data are further indicative of the fact that ozone is not being suddenly destroyed but within dozens of

Card 2/3

SOV/50-58-10-4/20

On the Relationship Between the Total Ozone Content and Meteorological Conditions

hours. These rules suggested above are illustrated and explained by examples in dependence on some atmospheric processes in the course of the observation period.-There are 1 figure, 1 table, and 9 references, 5 of which are Soviet.

Card 3/3

33057

S/169/61/000/012/053/089  
D228/D305

3.5120

AUTHORS:

Britayev, A. S., and Kuznetsov, A. P.

TITLE:

Vertical distribution of ozone

PERIODICAL:

Referativnyy zhurnal, Geofizika, no. 12, 1961,  
14-15, abstract 12B99 (Tr. Tsentr. aerol.  
observ., 1959, no. 32, 28-35)

TEXT: The results are given for measurements of the overall content and vertical distribution of ozone over the southern part of the Union's European territory in April-June, 1959, from terrestrial observations of direct solar radiation and of UV-radiation scattered from the zenith of a clear sky. The measurements were accomplished with the help of a photoelectric spectrophotometer with a two-fold resolution of light by quartz prisms assembled according to the scheme of Dobson. The temperature, pressure, and direction and velocity of the wind at the surface were simultaneously measured by standard meteor-

Card 1/4

33057

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D228/D305

Vertical distribution...

instruments, and the amount and form of the cloudiness and optical phenomena in the atmosphere were also visually observed. A thermoelectric actinometer was used to estimate the atmosphere's transparency. Air streams, the heights of the tropopause, and atmospheric fronts were established on the grounds of the radioprobe data of neighboring stations and from maps of the baric topography. The meteorologic data were subjected to processing and were compared with the overall content and vertical distribution of ozone in the atmosphere. Calculations of the total content of ozone were made from the Bouger formula, the vertical distribution being computed by the method of Hetz and Dobson with the arbitrary division of the atmosphere into the layers 0 - 5 km, 5 - 20 km, 20 - 35 km, 35- 50 km, and above 50 km. The ozone content in the layer above 50 km was assumed to equal zero, while in the low 5 km layer it was supposed to be equal to 1% per 1 km of the value of its overall content. The decrease in the air temperature in the layer 3 km

Card 2/4

33057

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D228/D305

Vertical distribution...

beneath the tropopause is revealed when the total ozone content increases with the correlational relation equal to  $-0.54$ . The increase in the total ozone content is accompanied by the warming of the air in the 4 km layer above the tropopause, the coefficient of correlation in this case comprising  $+0.48$ . A low tropopause corresponds to a high ozone content: the appearance of extreme values for the height of the tropopause almost always precedes by approximately one day the appearance of extreme values for the total ozone content. The character of the vertical distribution of ozone is related to its overall content: as a rule, the higher the quantity of ozone in the atmosphere, the lower the center of gravity and the wider the ozone layer; the curve of the vertical distribution with a sharply expressed maximum concentration and a comparatively high center of gravity, on the contrary, corresponds to a low total content. The sinking of air with a high ozone concentration into the atmosphere's lower layers occurs when the height of the center of gravity of the ozone layer decreases simultaneously with the increase in

Card 3/4

33057

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Vertical distribution...

its total content. The ozone concentration in the ozonosphere's upper layers thereby somewhat decreases, but in the lower layers it grows substantially. [Abstracter's note: Complete translation.]

Card 4/4

34501

S/169/62/000/002/028/072  
D228/D301

3,5120

AUTHORS: Britayev, A. S. and Kuznetsov, A. P.

TITLE: Some results of research on atmospheric ozone

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 2, 1962, 14, abstract 2B116 (Tr. Tsentr. aerol. observ., no. 37, 1960, 3-4)

TEXT: The measurement method is described together with some results of research on variations of the total content and concentration of ozone in connection with physical processes in the atmosphere. The observations on atmospheric ozone were made at the Tsentral'naya aerologicheskaya observatoriya (Central Aerologic Observatory) from 1957 by means of a Dobson-type photoelectric spectrophotometer and an electrochemical analyzer designed at the CAO. Measurements of the amount of ozone on days with cloudy weather were accomplished by spectrometrically observing the light scattered from the zenith of the cloudy sky. The magnitudes of the total ozone content were, thereby, determined from transition dia-

Card 1/ 3



Some results of research ...

S/169/62/000/002/028/072  
D228/D301

grams, constructed from the data of simultaneous observations for direct solar radiation and for radiation scattered from the zenith of the cloudy sky on days with variable cloud. The use of this method permitted the tracing of ozone variations in connection with synoptic processes, whose passage in middle latitudes is usually accompanied by the formation of cloud. It is established that starting from January of each year the ozone content over Moscow increases to reach maximum values in the spring -- in March-May -- thereafter decreasing to minimum values at the end of autumn and beginning of winter. The average yearly value of the amount of ozone above Moscow, calculated with allowance for the Vigru coefficients, comprises 0.347 cm, the variational range of the average monthly values being about 0.13 cm; the maximum value (May 1957) was 0.434 cm, and the minimum (December 1958) was 0.273 cm. As a result of statistically studying 110 cases of ozone observations at the time of airmass interchange it is established that the passage of a warm front is often accompanied by a drop in the quantity of ozone in the atmosphere, while the passage of a cold front is frequently accompanied by the growth of the ozone concen-

Card 2/3

Some results of research ...

S/169/62/000/002/028/072  
D228/D301

tration. The passage of an occluded front is either marked by no variation whatsoever in the ozone concentration or else is accompanied by the increase or reduction of the total ozone content over the point of observation. Together with changes in the ozone quantity which are in agreement with Dobson's scheme, instances of ozone fluctuations supplementing or contradicting it are noted regularly. Cases of the weak rise in the amount of ozone behind a warm front and of the decrease in the total ozone content behind a cold front were detected in particular. It is established that there is a link between variations in the total ozone content and vertical air-currents in the atmosphere: descending air-currents are accompanied by an increase in the total ozone content, and vice-versa. It is shown that variations in the concentration of ozone in the air near the ground surface usually coincide with those of the total content, although instances are observed, too, where these two quantities deviate from the coordinated course. 13 references.

[Abstracter's note: Complete translation.]

Card 3/3

33058

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D228/D305

35120

AUTHORS: Kuznetsov, A. P., and Britayev, A. S.

TITLE: Observations on the vertical distribution of  
ozone over Moscow

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 12, 1961,  
15, abstract 12B100 (Tr. Tsentr. aerol. observ.,  
1960, no. 37, 8-12)

TEXT: The observational methods are stated together with  
some results of investigating the vertical distribution of ozone  
over Moscow. Observations were conducted with a photoelectric  
spectrophotometer of the Dobson type which separates two light  
rays with wavelengths of 3114 and 3326 Å and spectral intervals  
of 10 and 14 Å. The vertical distribution of ozone was calcu-  
lated from measuring the relative intensity of these two rays

Card 1/3

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D228/D305

Observations on the...

of scattered light at high zenith angles of the sun in accordance with the method proposed by Walton. The amount of ozone in the lower 12 km layer was assumed to equal 8.5% of the value of its total content, determined from direct sunlight. The exponential decrease in the amount of ozone with altitude was proposed for the layer above 36 km. The absorption coefficients of Viger were used in the calculated solution of the problem; the data on the density of air to a height of 25 - 26 km were determined from tables of aerologic probing, those for greater altitudes being taken from tables of the standard atmosphere. As a result of the calculations, it is shown that the introduction of the new absorption coefficients of Viger instead of the previously used coefficients of Ni Tzi-ze and Chung Shin-piu increases the ozone concentration in all the ozonosphere's layers by approximately one-third. The patterns of the connection of the total quantity of ozone with the meteorologic elements are preserved. The number of cases when the solution of the equa-

Card 2/3

33058

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D228/D305

Observations on the...

tions does not lead to definite results has increased. Therefore, the perfection of methods for processing the material of terrestrial spectrometric data and the more precise definition of the coefficient of absorption continue to remain urgent problems. The height of the ozone layer's center of gravity has increased in comparison with previous data, which is evidently explained by the new arbitrary subdivision of the atmosphere into layers for which the ozone concentration is being determined. [Abstracter's note: Complete translation.]

Card 3/3

L 10064-63 EWT(1)/BDS--AFPTC/ASD/ESD-3/APGC/SSD--F1-4/PC-4/Fq-4--GW  
 ACCESSION NR: AR3000341 S/0058/63/000/004/A020/A020

SOURCE: RZh. Fizika, Abs. 4A180

AUTHOR: Iozenas, V. A.; Kuznetsov, A. P.

TITLE: Photoelectric spectrophotometer for observation of atmospheric ozone

CITED SOURCE: Sb. Atmosfern. ozon. M., Mosk. un-t, 1961, 14-17

TOPIC TAGS: spectrometers, sunlight, photoelectric, ozone

TRANSLATION: A spectrophotometer is described, constructed on the basis of a double quartz monochromator (DMR-1) and intended for the measurement of spectra of sunlight scattered from the zenith. The monochromator, with relative aperture 1: NVERSE DISPERSION EQUAL TO  $\approx 1$  Angstrom per millimeter in the 3200 Angstrom region, has 2 output slits which separates the regions of the spectra near 3114 and 3324 Angstroms. The corresponding radiation fluxes are applied alternately (with the aid of 90 CPS vibrator converter) to an FEU-19 radiation receiver, the response of which is applied to a narrow band (approximately 5 CPS)

Card 1/2

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ACCESSION NR: AR3000341

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amplifier. The intensity ratio of the two wave lengths is measured by a null method using an optical wedge of SS-4 glass with a density drop equal to two units. The accuracy of measurement of the intensity ratio with the zenith distance of the sun equal to 60 is equal to 0.5%. The minimum fluxes registered by the instrument in the 3100 Angstrom region are equal to  $10 \text{ sup } -14 \text{ W/Sq. cm. sec.}$ , making it possible to start the measurements 10 minutes before sunrise and terminate them 10 minutes after sunset. The spectrophotometer is mounted on a carriage and can operate under field conditions. A. Aleksandrov

DATE ACQ: 14May63 ENCL: 00 SUB CODE: PH

1m/nh  
Card 2/2

S/169/63/000/002/014/127  
D263/D307

AUTHORS: Kuznetsov, A. P., Iozenas, V. A. and Britayev, A. S.

TITLE: Observations of the vertical distribution of ozone in the atmosphere over Moscow

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 2, 1963, 13-14, abstract 2B108 (In collection: Atmosfern. ozon, M., Mosk. un-t, 1961, 55-60 (summary in Eng.))

TEXT: The method of calculation is described and some results are quoted of observations of the vertical distribution of ozone in the region of Moscow. The calculations were carried out from spectrophotometric observations of scattered uv radiation from the sun, from the zenith of a cloudless sky, by the method of Getts and Dobson. New coefficients for the absorption of light by ozone (after Virg) were used in the calculations, employing the arbitrary division of the atmosphere into five 12-km concentric layers as suggested by Walton. It was hence established that introduction of the new absorption coefficients increased the calculated ozone concentrations

Card 1/2



Observations of the vertical ...

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D263/P307

by  $\sim 1/3$ , whilst the nature of the relation of this quantity to meteorological elements remained unchanged. During the calculation of ozone distribution with height, the number of cases where solution of equations did not correspond to determined results was increased. Height of the maximum ozone layer was calculated as higher than suggested by previous data, which may probably be due to the new arbitrary subdivision of the atmosphere into layers. [Abstracter's note: Complete translation.]

Card 2/2

S/169/63/000/002/022/127  
D263/D307

**AUTHORS:** Britayev, A. S. and Kuznetsov, A. P.

**TITLE:** On the connection of atmospheric ozone with meteorological conditions

**PERIODICAL:** Referativnyy zhurnal, Geofizika, no. 2, 1963, 15-16, abstract 2B117 (In collection: Atmosfern. ozon, M., Mosk. un-t, 1961, 170-175 (summary in Eng.))

**TEXT:** The relations between the variation of the overall ozone content and oscillations of the tropopause layer, air, temperature, and vertical currents in the troposphere are studied by statistical analysis. It is shown that, for the region of Moscow, the correlation coefficient between ozone variations and the temperature of the 3 km layer under the tropopause is -0.54, and that between the ozone variations and the temperature of the 4 km layer above the tropopause it is 0.48. The descending currents of air, determined at the 1.5 and 3 km layers by the divergence of wind velocity and at heights of 3 to 28 km by the rotation rates of vanes of

Card 1/2

On the connection of ...

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D263/D307

radiosondes is, as expected, accompanied by an increase in the overall concentration of ozone, whilst the ascending currents are accompanied by a decrease in the ozone content. The best agreements between the variations of these two quantities are found when data concerning the vertical aerial currents above 16 km are used; on the other hand, ozone variations are occasionally in agreement with the sign of the aerial current also in the troposphere. According to the authors, this may be due to the fact that in certain synoptic situations, such as in regions of cyclones and anticyclones, vertical currents of the same direction may cover a large part of the troposphere and extend into the stratosphere, reaching the ozone-rich layer. During the summer and winter months variations in the overall ozone content are related more closely to the vertical movements of air than to the horizontal transport. In intermediate periods, on the other hand, and particularly in the spring, the influence of advection and large scale turbulence plays the predominant part. Appearance of the spring maximum in the overall ozone concentration is connected chiefly with advection, and vertical movements of the air are then practically unconnected with ozone fluctuations. [Abstracter's note: Complete translation.]

Card 2/2

YAKOVLEVA, A.V.; KUDRYAVTSEVA, L.A.; BRITAYEV, A.S.; GERASEV, V.F.;  
KACHALOV, V.P.; KUZNETSOV, A.P.; PAVLENKO, H.A.; IOZENAS, V.A.

Spectrometric investigation of the ozone layer up to the  
altitude of 60 km. Isk.sput.Zem. no.14:57-68 '62.

(MIRA 15:11)

(Ozone)

(Atmosphere, Upper--Rocket observations)

L 2963-66 FS8-2/ENT(1)/FS(v)-3/FCC/EWA(d) TT/CS/GW  
 ACCESSION NR: AT5023567 UR/0000/65/000/000/0077/0088  
 AUTHOR: Lebedinskiy, A. I.; Krasnopol'skiy, V. A.; Kuznetsov, A. P.; Iozanas, V. A.  
 TITLE: Investigation of terrestrial atmospheric radiation in the visible and ultra-violet regions  
 SOURCE: Vs'soyuznaya konferentsiya po fizike kosmicheskogo prostranstva, Moscow, 1965. Issledovaniya kosmicheskogo prostranstva (Space research); trudy konferentsii. Moscow, Izd-vo Nauka, 1965, 77-88  
 TOPIC TAGS: atmospheric radiation, visible radiation, IR radiation, UV radiation, instrumentation satellite, satellite data analysis, radiation measurement, airglow/Cosmos 45 satellite  
 ABSTRACT: Measurements of airglow and scattered solar UV radiation were made by Cosmos-45 in 1964. Scattered UV radiation was measured by a UV spectrophotometer (range, 2250—3100 Å; resolution, 15 Å; field of vision, 20 km in width) operating only on the day side of the Earth. Airglow was measured by a colorimeter (field of vision, 120 km in width) operating only on the night side. For switching the instruments and fixing on the underlying surface, a sensor which measured illumination at 0.6 to 0.85 μ was used. The colorimeter carried four light filters on a common axis mounted along a disk. One filter  
 Card 1/3

L 2963-66

ACCESSION NR: AT5023567

zodiacal light was relatively small. A comparison of these readings (averaged) with the results of ground observations at 3200—4000 Å lead to the conclusion that night sky radiation at 2500—3000 Å is small and at 3200—4000 Å does not exceed star glow and zodiacal light. Measurements at 1700—2500 Å indicated that no night sky radiation exists in this region. Thus, results of measurements over the entire wavelength range (1700—4000 Å) confirmed the absence in the night sky of high-energy excitation processes. Orig. art. has: 7 figures. [JP]

ASSOCIATION: none

SUBMITTED: 02Sep65

ENCL: 00

SUB CODE: ES, AA

NO REF SOV: 004

OTHER: 008

ATD PRESS: 4109

BVK

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L 2963-66

ACCESSION NR: AT5023567

screened out UV radiation; its long-wave boundary was near 6000 Å. The second was used to investigate wavelengths at 2500 to 4000 Å, and two narrow-band filters with passbands of 100 Å filtered emission at 5577 Å and 3914 Å, respectively. An IR spectrophotometer recorded thermal radiation concurrently with the operation of the other two instruments. A correlation was found to exist between readings of the UV and IR spectrophotometers in the 9.65-μ ozone band. A correlation of intensities was also disclosed near the long-wave boundary of the UV spectrum at  $\lambda > 3000$  Å and in the readings of the illumination sensor. These readings depended strongly on cloudiness because the albedo of clouds in the red zone is substantially greater than the albedo of the Earth's surface and of the clear atmosphere. The correlation confirms that at  $\lambda > 3000$  Å, the noticeable part of atmospheric radiation is due to tropospheric dispersion and reflection occurring below the basic mass of the ozone layer. Conclusions were also reached on local, diurnal, and latitudinal variations of airglow. A difficulty arose in the evaluation because of the dependence of the readings on cloud cover. In making the measurements in space, it was necessary to include reflections of airglow from the atmosphere and glow of astronomical origin in addition to airglow itself. Consequently, results varied with atmospheric conditions by as much as a factor of two, with the minimum occurring during cloudless weather and the maximum during total cloudiness. The correlation of readings of one light filter (5577 Å) with the others indicated that the share of illumination from the stars and

Card 2/3

L 23449-66 FSS-2/EWT(1) IT/GW

ACC NR: AP6011690

SOURCE CODE: UR/0203/66/006/002/0185/0189

AUTHOR: Krasnopol'skiy, V. A.; Kuznetsov, A. P.; Lebedinskiy, A. I.

ORG: Moscow State University, Institute of Nuclear Physics (Moskovskiy gosudarstvennyy universitet Institut yadernoy fiziki)

TITLE: Measurements of the ultraviolet spectrum of the earth made by the satellite "Kosmos-65"

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 2, 1966, 185-189

TOPIC TAGS: solar ultraviolet radiation, ultraviolet spectrophotometer, diffractive monochromator, ozone concentration, spectral brightness, radiation intensity

ABSTRACT: Solar ultraviolet radiation reflected from the terrestrial atmosphere was measured with an ultraviolet spectrophotometer mounted on the artificial satellite "Kosmos-65." The spectrophotometer used was a double diffractive monochromator operating in the spectral range of 2250—3070 Å. 2500 spectra were obtained during the flights. Spectra were recorded on motion-picture films. The distribution of energy in the violet spectrum changes with the zenithal distance of the sun and the geographical latitude. Local peculiarities caused by the ozone concentration appear. Longer waves in the ultraviolet range penetrate deeper into the atmosphere and increase the albedo intensity. Two kinds of spectra were obtained on cloudless days

Card 1/2

UDC: 523.72:629.192.2



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ACC NR: AP6011690

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in the equatorial zone: the typical spectrum and the spectrum of maximum intensity. The first consists of the usual spectra of tropical zones and the second seldom occurs. The intensity of radiation reflected by the atmosphere depends upon the quantity of ozone in a vertical column of the atmosphere. Spectra of the terrestrial atmosphere and the sun obtained under the same solution conditions have great structural similarity. The decrease in intensity in the atmospheric spectrum occurring with decrease in wavelength is greater than in the solar spectrum. The authors thank Yu. V. Yaremenko, V. I. Malin and M. B. Glot for their great help with this experiment. Orig. art. has: 4 figures, 1 table, and 1 formula. [EG]

SUB CODE: 04/ SUBM DATE: 24Nov65/ ORIG REF: 003/ OTH REF: 009/ ATD PRESS:

4232

Card 2/2 *dda*

MAZALOV, Yevgeniy Vasil'yevich; LAVRIKOV, Yu.A.; KUZNETSOV, A.P.

[Along the paths of technical progress; from the work of the Leningrad party organization, 1951-1961] Na putyakh tekhnicheskogo progressa; iz opyta raboty leningradskoi partiinoi organizatsii, 1951-1961 gg. Leningrad, Lenizdat, 1962. 480 p. (MIRA 17:10)

KUZNETSOV, A.P.

Preparing chlorides on a continuous production line. Avt.  
dor. 27 no.4:28 Ap '64. (MIRA 17:9)

BRITAYEV, A.S.; KUZNETSOV, A.P.

Atmospheric ozone and some meteorological processes. Trudy TSO  
no.45:22-31 '62. (MIRA 16:10)

KUZNETSOV, A.P., kand. tekhn. nauk, dotsent

Problems in the precision machining of heavy shafts. Trudy GPI  
17 no.4:41-48 '61. (MIRA 16:12)

KUZNETSOV, A.P., otv. red.; MALIKOV, M.F., zasluzhennyy deyatel' nauki i tekhniki, prof., red.; BARINOV, V.A., doktor tekhn. nauk, prof., red.; LEONOV, B.M., red.; MALIKOV, S.F., kand. tekhn. nauk, red. KOL'CHENKO, G.N., red.

[Hundred years of the state weights and measures service in the U.S.S.R.] Sto let gosudarstvennoi sluzhby mer i vesov v SSSR. Moskva, Gos. izd-vo tekhniko-teoret. lit-ry, 1945. 376 p. (SSSR. Gosudarstvennye standarty) (MIRA 14:7)

1. Russia(1923- U.S.S.R.) Komitet standartov, mer i izmeritel'nykh priborov. 2. Predsedatel' Komiteta po delam mer i izmeritel'nykh priborov pri Sovete Narodnykh Komissarov SSSR (for Kuznetsov)
  3. Chlen Komiteta po delam mer i izmeritel'nykh priborov pri Sovete Narodnykh Komissarov SSSR (for Leonov)
- (Weights and measures)

19

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**"APPROVED FOR RELEASE: 06/19/2000**

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Card

**APPROVED FOR RELEASE: 06/19/2000**

**CIA-RDP86-00513R000928110017-2"**



KUZNETSOV, A.P.

Introducing the KKh-391 jig grinder with optical control. *Sib. tekhn.  
ekon. inform. Gos. nauch.-issl. inst. nauch. i tekhn. inform.* 18 no. 4:26-27  
Ap '65. (MIRA 18:6)

KOLOGSOV, A.A.; DEMIDOV, G. Ye.; KUZNETSOV, A.P.

Apparatus for the removal of tartar with the aid of ultrasonic  
waves. Trudy VNIIMIO no.3:79-86 '63 (MIRA 18:2)

KUZNETSOV, A. P.

KUZNETSOV, A. P. --"Peculiarities of the Summation Phenomena in the Presence of a Stable Focus of Excitation in the Cerebral Cortex." Inst. of Experimental Medicine of the Acad. Med.Sci. USSR, Leningrad, 1955. (Dissertation for the Degree of Candidate in Medical Sciences)

SO: Knizhnaya Letopis', "o. 35, 1955

VYSOTSKIY, B.V.; MALYKH, F.S.; KUZNETSOV, A.P.

Game animals as supplementary reservoirs of pathogenic *Leptospira* in natural conditions. Zhur. mikrobiol. epid. i imun. 29 no.8:49-51 Ag '58.  
(MIRA 11:10)

1. Iz Vladivostokskogo instituta epidemiologii, mikrobiologii i gigiyeny.

(LEPTOSPIROSIS, transm.

by wild animals (Rus))

(ANIMALS, dis.

leptospirosis, transm. by wild animals (Rus))

KOLOSOV, A.A.; DEMIDOV, G.Ye.; KUZNETSOV, A.P.

Apparatus for removing dental calculus by means of ultrasonics.  
Med. prom. 17 no.9:53-58 S'63. (MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut meditsinskikh  
instrumentov i oborudovaniya.

S/193/60/000/012/017/018  
A004/A001

AUTHOR: Kuznetsov, A. P.

TITLE: New Technical Equipment and Technology at the Chelyabinsk Sovnarkhoz Plants

PERIODICAL: Byulleten' tekhniko-ekonomicheskoy informatsii, 1960, No.12, pp.66-67

TEXT: The author reports that a number of resolutions have been passed by the Chelyabinsk Sovnarkhoz concerning the fulfilment of the Seven-Year Plan. He points out that ultrasonic tooling becomes of increasing importance at the Sovnarkhoz plants. The widespread use of ultrasonic equipment in various fields of industry results in great technical and economic effects. In 1960 the Troitskiy stankostroitel'nyy zavod (Troitsk Machine Tool Plant) will produce 100 ultrasonic machines for the tooling of brittle and hard materials, and 25 ultrasonic welding apparatus. A number of shops of this plant have been rebuilt and reequipped, which will enable the plant to increase the output of high-quality ultrasonic equipment during the next years. A special team consisting of workers of a number of Sovnarkhoz Administrations, of the Chelyabinskiy traktorny zavod (Chelyabinsk Tractor Plant) and the Chelyabinskiy kuznechno-pressovyy zavod (Chelyabinsk Plant

Card 1/2

S/193/60/000/012/017/018  
A004/A001

New Technical Equipment and Technology at the Chelyabinsk Sovnarkhoz Plants

of Forging and Pressing Equipment), was created by the Sovnarkhoz to resolve problems in connection with the widespread use of the seamless die-forging process by the Shcherbakov method. The inventor of this method, Shcherbakov, and workers of the Nauchno-issledovatel'skiy institut tekhnologii mashinostroyeniya (Scientific Research Institute for Technology of Mechanical Engineering) also participate in the team. The research work carried out by the Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (Central Scientific Research Institute of Ferrous Metallurgy), Zlatoustovskiy metallurgicheskiy zavod (Zlatoust Metallurgical Plant) and Chelyabinsk Sovnarkhoz, in the field of refining electrosteel in the ladle by liquid synthetic slag showed the possibility of obtaining high-quality steel by this process. This refining process is to be introduced in some of the Chelyabinsk Sovnarkhoz plants in the course of 1961 and 1962.

Card 2/2





ACCESSION NR: AR4047606

agree of improvement in the filling of the intake system.

a gas-turbo-charged diesel. In theory, it is most advantageous to have a variable volume for the intake system on the engine, which will change depending on the speed and load conditions of operation. It is advisable to increase the volume of intake systems of this type by dividing the air cleaner into two sections, with the first stage of the cleaner arranged rationally in front of the compressor and the second element located between the compressor and the intake collector.

PR

ENCL: 00

KUZNETSOV, A.R.; MONASTYRSKAYA, M.S.; PAVLOV, S.A.

Ionization coating of fabrics with latex films. Leg.prom. 18  
no.7:25-27 JI '58. (MIRA 11:9)  
(Rubber coating) (Leather, Artificial)

SOV/138-59-4-5/26

AUTHORS: Kuznetsov, A.R., Lyudvig, P., Monastyrskaya, M.S., Pavlov, S.A.

TITLE: The Ionic Deposition of Carboxylate Latexes. Communication 2: Increasing the Thermal Stability of Films Prepared from Carboxylate Latexes ( K voprosu ob otlozhenii karboksilatnykh lateksov. Soobshcheniye 2. Povysheniye termostoykosti plenok, poluchayemykh iz karboksilatnykh lateksov)

PERIODICAL: Kauchuk i Rezina, 1959, Nr 4, pp 17-19 (USSR)

ABSTRACT: The first part was published in "Kauchuk i Rezina", 1959, Nr 1. Experiments were carried out on increasing the thermal stability of carboxyl groups containing latex films by ionic deposition. The following factors were determined for films made from SKS-5-30 latex: dependence of the tensile strength on the time of vulcanisation, relaxation curves and equilibrium moduli at 100% elongation ( Figures 1 and 2). The vulcanisation temperature was 100°C, pH 6.7, 20% magnesium chloride was used as a vulcanisation agent. Experiments showed that the tensile strength increased on raising the vulcanisation temperature. Films made of latex SKS-5-30 with polymethyl acrylate were also tested as the introduction of polyacrylates increases the adhesion of carboxylate latex films to fibres (Figures 3, 4 and 5).

Card 1/2 Optimum strength was obtained when 20% of either polymethyl

SOV/138-59-4-5/26

The Ionic Deposition of Carboxylate Latexes. Communication 2:  
Increasing the Thermal Stability of Films Prepared from Carboxylate  
Latexes

acrylate or polymethyl methacrylate emulsions were added to the latex. Investigations on the action of calcium ion as coagulating and vulcanising agent showed that calcium chloride can be used for this purpose. Films with the largest degree of thermal stability were obtained by adding melamine-formaldehyde resins to the SKS-5-30 latex and vulcanising the product in the presence of magnesium ions. The reaction mixture was heated for 30 minutes at 100°C and subjected to vulcanisation for one hour at pH of 8.1; 20% magnesium chloride solution was used as a vulcanising agent. Results obtained during these experiments are discussed and given in the form of graphs (Figures 6 and 7). The strength of films was considerably increased when using SKS-5-30 in conjunction with melamine-formaldehyde resins; optimum results were obtained when 20% of the resin was used. The vulcanisates show considerable relative elongation even when 30% of the resin is added to the polymer.

There are 7 figures and 4 Soviet references.

ASSOCIATION: Moskovskiy tekhnologicheskiy institut legkoy promyshlennosti  
Card 2/2 -nosti (Moscow Technological Institute of Light Industry)

KUZNETSOV, A.B.; MONASTYRSKAYA, M.S.; PAVLOV, S.A.

Problem of ion deposits of carboxylate latices. Report No.1:  
Preparation of fabrics coated with carboxylate latex by the method  
of ion deposition. Kauch. i rez. 18 no.1:13-15 Ja '59.

(MIRA 12:1)

1. Moskovskiy tekhnologicheskii institut legkoy promyshlennosti.  
(Rubber coatings) (Ion exchange)

PAVLOV, N.N., inzh.; KUZNETSOV, A.R., inzh.; ARBUZOV, G.A., doktor tekhn. nauk, prof.

Complexometry of trivalent chromium. Report No.1. Izv. vys. ucheb. zav.; tekhn. leg. prom. no. 1:54-59 '60. (MIRA 14:5)

1. Moskovskiy tekhnologicheskiy institut legkoy promyshlennosti. Rekomendovana kafedroy neorganicheskoy i analiticheskoy khimii. (Chromium—Analysis)

PAVLOV, N.N., inzh.; KUZNETSOV, A.R., inzh.; ARBUZOV, G.A., doktor  
tekhn.nauk, prof.

Complexometric analysis of trivalent chromium. Report No. 2. Izv. vys.  
ucheb. zav.; tekhn. leg. prom. no.2:55-61 '60. (MIRA 13:11)

1. Moskovskiy ~~biologicheskiy~~ institut legkoy promyshlennosti.  
Rekomendovaniye ~~metodov~~ neorganicheskoy i analiticheskoy khimii.  
(Chromium--Analysis)

PAVLOV, N.N., assistant; KUZNETSOV, A.R., assistant; ARBUZOV, G.A., doktor tekhn.nauk, prof.

Quantitative analysis of chromium (III) in the solutions and films of high polymers. Nauch.trudy MTILP no.18:47 '60. (MIRA 15:2)

1. Kafedra neorganicheskoy i analiticheskoy khimii Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti.  
(Chromium--Analysis) (Polymers)



PAVLOV, N.N., inzh.; KUZNETSOV, A.R., inzh.; ARBUZOV, G.A., prof., doktor  
tekhn.nauk

Studying the stability of aluminum (III) complex compounds. Izv.  
vys.ucheb.zav.; tekhn.prom. no.2:22-28 '61. (MIRA 14:5)

1. Moskovskiy tekhnologicheskoy institut legkoy promyshlennosti.  
Rekomendovana kafedroy neorganicheskoy i analiticheskoy khimii.  
(Aluminum compounds)

S/081/62/000/012/057/063  
B158/B101

AUTHOR: Kuznetsov, A. R.

TITLE: Production of films by ionic deposition

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 12, 1962, 612, abstract  
12P276 (Nauohn. tr. Mosk. tekhnol, in-t legkoy prom-sti,  
no. 19, 1961, 31-34)

TEXT: A description is given of a device for the preparation of films of various latexes (L) by ionic deposition on (cloth, paper) bases. Films are obtained on a previously wetted fixative and a dried undersurface placed on a horizontal glass plate under conditions similar to a suggested technological process. A fixed amount of L is uniformly spread over the surface of the sample with the aid of a special device. The thickness of the films is regulated by the time of deposition and the amount of L. To reduce shrinkage, the films are removed from the undersurface before vulcanization. In this case they are poured in a form with caprone fabric used as undersurface. The fabric pressed into horizontal form is impregnated with fixative, dried and a given amount

Card 1/2

Production of films by ionic ...

S/081/62/000/012/057/063  
B158/B101.

of L spread evenly on it. Water formed during syneresis is removed from the surface of the film by heating with an infra-red lamp. The film is dried for 3-4 min at 90-95°C, after which it is easily removed from the undersurface. [Abstracter's note: Complete translation.]

Card 2/2

KUZNETSOV, A.R., assistant; PAVLOV, N.N., kand.khimicheskikh nauk, assistant

Chelatometry of barium solutions. Nauch.trudy MTILP no.23:  
62-66 '61. (MIRA 15:9)

1. Kafedra neorganicheskoy i analiticheskoy khimii Moskovskogo  
tekhnologicheskogo instituta legkoy promyshlennosti.  
(Barium) (Chelatometry)